CURBSIDE CONSULT

When genital pain occurs in adolescent boys, what conditions should we be thinking about?

Physicians should first think of the most probable etiologies of penile pain, such as sexually transmitted diseases or trauma. It is important, however, to then consider a broad range of differential diagnoses in each patient with genital pain.

LOCALIZED AND REFERRED PAIN

Independent penile pain is a rare complaint[1] and may be secondary to a local disease or a result of referred pain. The inferior hypogastric plexus (T10-L1 (sympathetic) and S2-S6 (parasympathetic) nerves) is thought to be the neural integrative system in the pelvis that innervates the urinary bladder, proximal and distal urethra, rectum, and reproductive and genital structures.[2] The neural supply of the penis is derived from the cavernosal and pudendal nerves (S2-S4).[3] When the sensory nerves that innervate organs of similar embryonic origin are stimulated by a pathologic process,[4] pain can be mislocalized to any area innervated by the spinal segment that also innervates the damaged viscera.[5]

PRIMARY AND SECONDARY CAUSES

The radiation of pain plays an integral part in determining urologic from non-urologic processes. Primary pathologic processes within the penis that can result in pain include urethritis, urethral foreign bodies, priapism, Peyronie's disease, trauma, paraphimosis, and external dermatologic conditions and/or insect bites (for example ant and spider bites). Primary processes involving areas adjacent to the organ that result in penile pain include prostatitis and scrotal disorders (such as testicular torsion, epididymitis, and orchitis). Pain experienced in a flaccid penis typically is the result of inflammation caused by sexually transmitted diseases or balanoposthitis, whereas pain in an erect penis is usually due to priapism or Peyronie's disease. Paraphimosis and balanitis should be considered in the differential diagnosis of penile pain in men who are uncircumcised.

Penile pain is associated with testicular torsion, blunt/straddle injury (penile trauma or penile fracture), penetrating injury, and the relatively under-diagnosed conditions of male genital pain syndrome,[5] reflex sympathetic dystrophy,[6] and painful male urethral syndrome.[7] Patients with direct inguinal hernia, [8] pudendal neuralgia,[9,10] and pain disorder associated with psychological factors[11,12] may also experience penile pain.

Testicular torsion

Testicular torsion is a urologic emergency that can cause penile pain. Torsion should be considered first in the differential diagnosis of adolescents with groin pain.

Trauma

Penile fracture is an unusual urologic emergency characterized by traumatic rupture of the tunica albuginea (one of the strongest fascial layers of the body) and of one or both corpus cavernosa affecting the rigid penis (figure). The incidence of penile fractures is unknown because such trauma is not always reported. Patients typically report striking their erect penis on an object, followed by the sudden onset of pain in the shaft of the penis and subsequent rapid detumescence. A cracking or popping sound may be heard at the moment of injury.

Physical examination reveals swelling and ecchymosis of the penile shaft at the area around the flaccid corpora. Hematoma formation usually causes deviation of the penis to the opposite side of the injury. Blood at the urethral meatus or gross hematuria is indica-

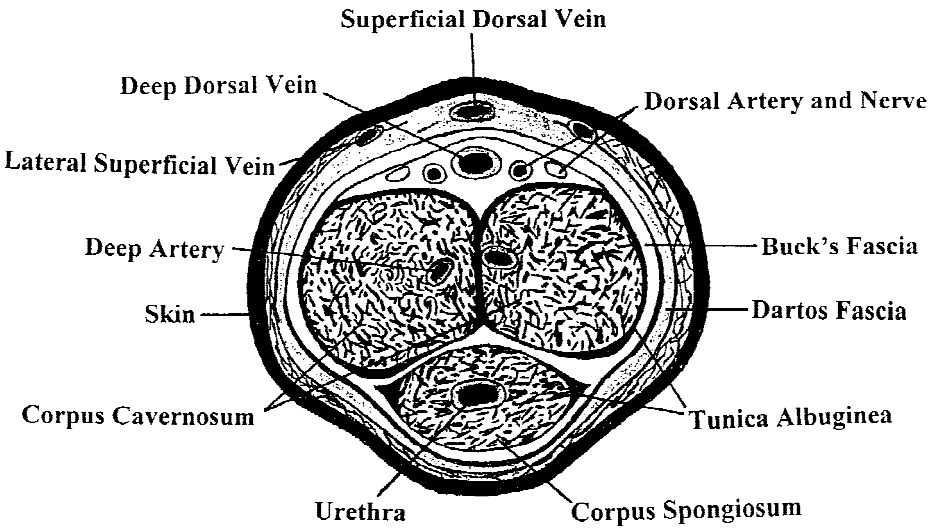

Figure 1 Cross section of the penile shaft. The corpus cavernosa consists of masses of cavernous erectile tissue enclosed in a dense fibrous capsule, the tunic albuginea

tive of urethral injury. Treatment of penile fracture involves surgical intervention (evacuation of the hematoma and repair of the tunica albuginea) or the use of nonsteroidal medications and compression dressings.

A straddle injury is a relatively common cause of penile pain in adolescents. Trauma of this type may also result in urethral injury.

When blood is found at the urethral meatus following penile fracture or straddle injury, retrograde urethrography is used to evaluate the extent of injury and to ensure safe placement of a Foley catheter if catheterization is required.

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How should doctors talk to teen patients?

Doctors can be intimidating to teens and it is important to help them tell you what's on their mind. Health care practitioners caring for adolescents should follow these tips on how to talk to their teen patients.

- Remind your patients that, by law, you cannot disclose anything discussed between you and your patient. This will make teens feel more comfortable talking to you.
- Don't be shocked (or at least show your shock). It is difficult for a teen to talk to a doctor who looks shocked. Just because you've never met a pregnant 10 year old does not allow you to look her in the eye with a stunned look and say nothing. (This tip is especially helpful in the case of problems to do with sex.)
- Let your patient know, through both body language and words, that they can discuss anything with you. Teens need to know that their doctor is accessible to them.
- Doctors, in my experience, refrain from discussing their patients' sexual pasts with them. This is probably because any adult, or anyone for that matter, is uncomfortable hearing about anyone's sex life, especially an adolescent's. Not until I began visiting the doctors at college did a doctor ask me about my sexual activity without my prompting a question that would lead them to ask. When a patient comes for a simple check-up, doctors should make sure that their patient is entirely healthy. A good way to make sure is to ask about their patient's sexual activity.
- Believe what their patients say. On one occasion, a doctor who asked me if I was pregnant, did not listen to me when I told him that I was not sexually active, and kept pressuring me. Unless you are absolutely sure that a patient is not being truthful, do not prod them into telling you what you want to hear.
- If a parent is present in the exam room, ask them to leave or ask your patient if they would prefer to have their parent(s) present or not. If a parent is either present or not, it can change the patient's comfort level, and change whether or not you hear what is actually bothering the patient.
- Treat teen patients in a way that is right for their age. Because most teens still see pediatricians, many pediatricians make the mistake of talking to their teen patients like the 4 year olds they treat. Teens are almost adults, and like to be treated like they are adults.
- Parents and doctors should explain the procedure of a pelvic examination and their feelings and experiences with it so that the teen understands that other people have survived them. Also, one important thing to tell patients ahead of time is that a female nurse must be present during the procedure when the examination is performed by a male doctor. Many of my friends have made gynecologic appointments and have been seen by male doctors. They have been scared of being seen by men and are frightened of molestation. Knowing before the examination that by law a woman must be present can calm the patient.

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